Page 1

=> d ibib ab hitstr 1-4

LS ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1969:47171 CAPLUS
DOCUMENT NUMBER: 70:47171
TITLE: 7-Nitro-and 9-nitro tetracyclines
INVENTOR(S): Winterbottom, Robert; Bitha, Panayota; Kissman, Henry

M. American Cyanamid Co. U.S., 3 pp. CODEN: USXXAM PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: E
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 3397230 A 19680813 US 1966-533830 19660314

I (R) = R4 = H) are treated with nitronium tetrafluoroborate (II) at 0-35.degree. to give I, where at least 1 of R3 and R4 is No2. Thus, a mixt. of 20 g. MeNO2 and 9.4 ml. fuming HNO3 is treated with 3.94 g. HF at -6.degree., sand. with BF3 at -6.degree., and filtered under N to give II. A soln. of 1.7 g. tetracycline in 40 ml. MeNO2 is treated with 0.312 g. II, the mixt. is agitated 1.5 hrs. at 25.degree., 500 ml. Et2O added, and the mixt. filtered to give 1.203 g. mixt. (as the HEFF salt) of 7-nitrotetracycline and 9-nitrotetracycline. Similarly prepd. are a mixt. of I (R = R2 = R4 + H, R1 - OH, R3 = NO2) (III) and I (R = R2 = R3 + H, R1 - OH, R2 = Me, R3 = NO2, R4 - H), a mixt. of I (R = R1 = R2 = R4 + H, R3 = NO2) and I (R = R1 = R2 - R4 + R3 = NO2, and I (R = R1 = R3 - H, R4 - NO2), a mixt. of I (R = R1 = R4 - H, R3 - R4 + H, R3 = NO2) and I (R = R1 = R3 - R4 - NO2), I (R3 = NO2, R4 - H), and V [from I (R3 = R3 + R4 = NO2)]. III and IV are sept. chromatographically (acid-washed Celite treated with di-Na EDTA and 2008-81-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation)

22008-91-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
22008-91-7 CAPLUS
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,6,10,12,12a-hexahydroxy-6-methyl-9-nitro-1,11-dioxo-,
mono[tetrafluoroborate(i-)] (BCI) (CAINDEX NAME)

CM 1

CRN 17779-46-3 CMF C22 H23 N3 O11 CDES 1:452:4A,4AA,5A,5AA,6B,12AA

Absolute stereochemistry.

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1968:443680 CAPLUS
DOCUMENT NUMBER: 69:43680 Preparation of 7- and(or) 9-nitro and aminotetracyclines Winterbottom, Robert; Kissman, Henry M.
American Cyanamid Co.
U.S., S.p.,
CODEN: USXXAM
Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 3388162 A 19680611 US 1966-598233 19661201
The prepn. of the title nitro compds., useful for the prepn. of the corresponding 7- and (or) 9-mono- or dialkylaminotetracyclines was described. Thus, a mixt. of 17 ml. MeNO2 and 9.4 ml. fuming HNO3 at -6.degree. was combined with 4 ml. HF and satd. with BF3 at -6.degree. to give nitronium tetrafluoroborate (1). A soln. of 1 g. tetracycline in 40 ml. MeNO3 was stirred 1.5 hrs. at 25.degree. with 0.312 g. I, mixed with 500 ml. ether, and filtered off to give 1.203 g. of a mixt. of II (R = R3 + H, R1 = Me, R3 = NO2) and II (R = R2 = H, R1 = Me, R3 = NO2) which was sepd. by chromatog. on Celite with 5:8:2:2 heptane-EtOAc-MeOH-HZO. Similarly prepd. were mixts. of the 7- and 9-nitro isomers of 11a-chlorotetracycline, II (R = R1 = R2 = R3 = H), 11a-chloro-6-demethyltetracycline, II (R = R1 = R2 = R3 = H), 11a-chloro-6-demethyltetracycline, II (R = R1 = R2 = R3 = H), and 11a-chloro-5-hydroxytetracycline in 560 ml. water was adjusted to pH 6 with 2N NaOH, mixed with 44 g. NaHSO4 with readjustment of the pH to 6, stirred 2 hrs., and filtered off to give 6-demethyl-7(and 9)-nitrotetracycline. A soln. of 5 mg. II (R = R1 = R3 = H, R2 = NO2) in 1 ml. MeOH contg. O.3 ml. 0.2M RCl vas mixed with 5 mg. 104 Pd-C and 0.025 ml. 404 CH2O to give, after 1.5 hrs. at room temp., II (R = R1 = R3 = H, R2 = NME2). Similarly prepd. by reductive alkylation were II (R = R3 = H, R1 = Me, R2 = NME2). 17779-46-3P NMe2). 17779-46-3P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of) 17779-46-3 CAPLUS

2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-9-nitro-1,11-dioxo- (8CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)

2 CH

CRN 16872-11-0

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)

L5 ANSWER 3 OF 4
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
HYPEMTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
U.S., 3 pp.
CODEN: USXXAM

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

US 3360561 PATENT NO. XIND DATE APPLICATION NO. DATE

17- and 9-nitrotetracyline, useful intermediates in the prepn. of biol. active 7- and 9-amino-tetracyclines, were prepd, from substituted tetracylines by use of XNO3 in CF3CO2H (TFA). Thus, to 1.0 g, 6-demethyleteracycline in 10 ml. TFA a soln. of 0.235 g. XNO3 in 2 ml. TFA was added dropwise, the mixt. stirred 1 hr. at room temp, and then added to 250 ml. ether, and the solids filtered off and purified by chromatog. on Versene-treated Celite to yield 1.72 mg. of a mixt. of 6-demethyl-7-nitrotetracyline (II) and 6-denethyl-9-nitrotetracyline (III); the process yields predominantly the 7-nitro isomer.

17779-46-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)
17779-46-3 CAPLUS
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-9-nitro-1,11-dioxo- (SCI) (CA INDEX NAME)

Absolute stereochemistry.

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS (Continued)

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1968:29484 CAPLUS DOCUMENT NUMBER: 68:29484

68:29484 Substituted 7 and 9-amino tetracyclines Winterbottom, Robertz Kissman, Henry M. American Cyanamid Co. U.S., 5 pp. CODEN: USXXAM TITLE: INVENTOR(5):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: Patent FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KINO DATE APPLICATION NO. DATE

US 3345410 19671003 US 19660314

The title compds. Ia (R1 or R2 are amine groups) are useful as antibacterial agents. A 17 cc. portion of MeNO2 and 9.4 cc. of fuming HNO3 were mixed in a polyethylene container as -6. degree. in a bath of 20% iso-PrOH, 80% H2O and Dry Ice. A 4 cc. portion of HF was added and the mixt. satd. with BF3 at -6.degree. until BF3 fumes were released. The white cryst. ppt. was filtered through a glass funnel under N and washed with 20 cc. MeNO2 and 20 cc. of FZCCICCIEJF. The nitronium tetrafluoroborate (I), was dried in vacuo at 60-70.degree. for 1.5 hrs. A 1.0 g. of tetracycline neutral was dissolved in 40 cc. of MeNO2. A 0.312 g. portion of I was added and the soln. stirred 1.5 hrs. at 25.degree. to yield 1.203 g. of the fluoroboric acid salt. A 100 g. portion of acid washed celite was suspended in a soln. of 20 g. of ETTA di-Na salt in 500 cc. of ZN HCI and the soln. stirred for 20 hrs. at room temp. The Celite was filtered through a sintered glass funnel and washed first with 61. of displacement. The Celite was then used with the system C7HIGAcOEL:McOH-H2O (5:8:2:2) to effect a sepn. between C7HIGACOEL:McOH-H2O (5:8:2:2) to effect a sepn. between C-demethyl-3-nitrotetracycline and G-demethyl-3-nitrotetracycline. The following Is were prepol and uv spectral data was given (R1 R2, and R3 given): NO2, H, OH; H, NO2, OH; Me2N, H, H; EEZN, H, H; H ME2N, H, OH; H, Me2N, H. Also prepol were the following G-demethyltetracyclines: 11a-blocked-7-nitro-, 11a-blocked-9-nitro-, 11a-blocked-5-hydroxy-179)nitro-17779-46-3P RLI SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

17779-46-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
17779-46-3 CAPLUS
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,6,10,12,12a-hexahydroxy-6-methyl-9-nitro-1,11-dioxo- (8CI) (CA INDEX NAME)

09/234,847 Page 4

=> d ibib ab fqhit 1-7

(Continued)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER:

136:102232 MARPAT
Preparation of 7-aubstituted tetracycline derivatives
for pharmaceutical use as antibacterial agents
Nelson, Mark L.; Frechette, Roger; Viski, Peter;
Ismail, Mohamed; Bowser, Todd; Bhatia, Beea;
Messersmith, David; McIntyre, Laura; Koza, Darrell;
Rennie, Glen; Sheahan, Faul; Hawkins, Faul; Verma,
Atul; Warchol, Tad; Bandarage, Upul
PATENT ASSIGNEE(S):
Trustees of Tufts College, USA; Paratek
Pharmaceuticals; Inc.
PCT Int. Appl., 97 pp.
CODEN: PIXXD2

DOCUMENT TYPE:
LANGUAGE:
PAHILY ACC. NUM. COUNT:
PATENT INFORMATION:

PATENT NO.
KIND DATE
APPLICATION NO. DATE

PATENT NO.
CO, CR, CC, UC, 2D, BC, DM, DM, DZ, EC, EE, SF, FT, 6B, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LY, MA, MD, MG, MK, MM, MM, MX, MQ, NO, NZ, PL, PT,
NO, RU, SD, SE, SC, SI, SK, SI, TJ, TM, TR, TT, TZ, UA, UG, UZ,
NY, CG, CI, CW, CA, DS, SI, SX, SI, TJ, TM, TR, TT, TZ, UA, UG, UZ,
NY, CG, CI, CG, CI, CM, GA, CM, WM, MM, MX, MZ, NO, NZ, PL, PT,
RV GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DX, ES, FT, FR, GB, GR, LE, IT, LU, MC, NL, PT, SE, TR, SF,
SH, CT, CG, CI, CM, GA, CM, WM, LM, RN, SM, TD, TG
PRIORITY APPLN. INFO:

US 2000-2167560P 200000707
AB 7-Substituted tetracycline derivs., such as I [R7 = NO2, alkyl, alkenyl,
alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl,
alkylamino, arylalkyl, amino, arylalkenyl, arylalkynyl, aminoalkyl, etc.),
were prepd. for therapeutic use as antibacterial agents. Thus,
7-phenylsancycline I (R7 = Ph) was prepd. in 42% yield by arom. coupling
reaction of 7-iodosancycline I (R7 = riodo) with PhB(CM)? using Pd(OAc)2
and Na2COJ in MeOH under an argon atm. at r.t. for 2 h. The prepd.
tetracycline derivs. were tested for antibacterial activity against
Escherichia coli, Enterococcus hirae, and Staphylococcus aureus.
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G1

- 32

ANSWER 1 OF 7 MARPAT COPYRIGHT 2002 ACS

and pharmaceutically acceptable salts also incorporates broader disclosure

L8 G1 G2 G4 MPL: NTE: G1

= 32

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L8 ANSWER 3 OF 7
ACCESSION NUMBER:
136:102231 MARPAT
Preparation of 9-substituted minocycline derivatives
for pharmaceutical use as antibacterial agents
Nelson, Mark L.; Frechette, Roger; Viski, Peter;
Ismail, Mohamed; Bowser, Toddo Dumonay, Jimmy;
Rennie, Glen; Liu, Gui; Koza, Darrell; Sheahan, Paul;
Stapleton, Karen; Hawkins, Paul; Bhatia, Beena; Verma,
Atul; McIntyre, Laura; Warchol, Tad
Trustees of Tufts College, USA; Paratek
Pharaceuticals, Inc.
PCT Int. Appl., 57 pp.
CODEN: PIXXD2
PATENT INFORMATION:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2002004406 A2 20020117 VO 2001-US20721 20010629
W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, II, IN, IS, PF, KE, KG, KF, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PI, PT,
RO, RU, SD, SE, SG, SI, SX, SI, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VX, YU, 2A, ZW, AM, AZ, BY, KG, XZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NI, PT, SE, TR, BF,
BJ, CF, CG, CT, CM, CA, GN, CM, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO:

US 2001-275621P 20010313

AB 9-Substituted minocycline derivs., such as I [R9 = NOZ, N:S, alkyl,
alkenyl, alkynyl, aryl, alkow, alkylthio, alkylsulfinyl, alkylsulfonyl,
alkylamino, arylalkyl, amino, arylalkenyl, arylalkynyl, aninoalkyl, etc.],
were prepd for therapeutic use as antibacterial agents. Thus,
minocycline deriv. I (R9 = CH2MHCONNICH4-4-CCF3) was prepd. in 374 yield
by reaction of the tribydrochloride salt of 9-(aminomethyl) minocycline I
(R9 = CH2NH2) and F3CO-4-C6H4NCO using Et3N in DMF at 25.degree. for 2 h.
The prepd. minocycline derivs. were tested for antibacterial activity
against Escherichia coli, Enterococcus hirae, and Staphylococcus aureus.
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L8 ANSWER 4 OF 7 MARPAT COPYRIGHT 2002 ACS

ACCESSION NUMBER:

136:102229 MARPAT

11TLE:

Preparation of 7,8 and 9-substituted tetracycline

derivatives

Melson, Mark L.; Koza, Darrell

ATRIT ASSIGNEE(S):

PATENT ASSIGNEE(S):

PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

PATENT NO.

English

PATENT NO.

XIND DATE

PATENT NO.

APPLICATION NO.

PATENT NO.

FAMILY ACC. NUM. COUNT:

PATENT NO.

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, MC, WC, ND, TP, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, HL, MR, NE, SN, TD, TG

WO 200201210 A1 20020214

WO 2002012100 A1 20020214

WO 200201210 A1 20020214

WO 200201210 A1 20020214

WO 200201210 A1 20020214

WO 200201210 A1 20020204

AB THR ANSWER A1 ANSW
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L8 ANSWER 3 OF 7 MARPAT COPYRIGHT 2002 ACS (Continued)

67

67 - OH
69 - NH2
611 - NH2
612 - OH
614 - 60

65 (O) G15

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67

Ak<EC (1-) C, BD (0-) D (0-) T> (SO (1-) G34)
MPL: claim 1
NTE: and pharmaceutically acceptable salts
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L8 ANSWER 4 OF 7 MARPAT COPYRIGHT 2002 ACS (Continued)

G1 - OH
G2 - OH
G5 - ethynyl
MPL: claim 1
NTE: and pharmaceutically acceptable salts
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L8 ANSWER 5 OF 7 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 135:371567 MARPAT
TITLE: Synthesis and phototoxicity of 4-
ded.imethylaminotetracycline derivatives
Ashley, Robert A.; Hlavka, Joseph J.
PATENT ASSIGNEE(S): Collagenex Pharmaceuticals, Inc., USA
POUMENT TYPE: PATENT INFORMATION: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
PATENT INFORMATION:

PATENT NO. XIND DATE APPLICATION NO. DATE

VO 2001087823 Al 20011122 WC 2001-U516272 20010518

V: AE, AG, AL, AM, AT, AU, AZ, BA, BG, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, ND, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SI, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BW, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, HW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO:

US 2000-479604 20000107

US 2000-573654 20000518

AB The present invention provides new chem. modified 4-dedimethylaminotetracycline compds. that can be substituted with aryl, alkenyl, or alkynyl groups at the 7, 8, and/or 9 positions. Other tetracycline compds. include the 4-dedimethylaminotetracycline derivs. With an oxime group, NH-Alkyl, or N-NH-Alkyl group substituted at the C4 position as well as C2 Mannich derivs. The present invention also provides a method of treating a mammal suffering from conditions or diseases by administering to the mammal an effective amt. of the new chem. modified tetracycline compds.
                                                           CH-52(0)
    L8 ANSWER 6 OF 7 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 135:117208 MARPAT
TITLE: Tetracycline compounds, their, and their use preparation for treatment of Cryptosporidium parvum-related disorders
Levy, Stuart B.; Nelson, Mark L.
PATENT ASSIGNEE(S): Trustees of Tufts College, USA
PCT Int. Appl., 37 pp.
CODEN: PIXXD2
PATENT LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
  PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2001052858 A1 20010726 WC 2001-US2093 20010123

W: AE, AG, AL, AH, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HH, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LK, LK, LK, LU, LU, LV, MA, MD, MG, MK, NN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, JJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, IJ, TM

RW: GH, GH, KE, LS, MW, MZ, SD, SL, SZ, TZ, LG, ZW, AT, BE, CH, CY, DE, DX, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, GT

PRIORITY APPLN. INFO.:

AB Methods and pharmaceutical compns. for treating Cryptosporidium parvum-related disorders in a mammal are disclosed. Several tetracycline compds. are prepd. (e.g. 13-(Phenylthio)-5-hydroxy-6-.alpha-deoxytetracycline), which are useful for treating Cryptosporidium parvum-related disorders.
        G1
                                                              - 35
        ₩Ç-
                                                              - CHO
- OH
- NH2
- NH2
    G5
G6
G7
G9
G10
G13
MPL:
NTE:
                                                                                  OH
Bu-t
                                                                                    and pharmaceutically acceptable salts additional heteroatom interruptions also claimed
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L8 ANSWER 5 OF 7 MARPAT COPYRIGHT 2002 ACS (Continued)

G8 = 58

EN — G11

MPL: claim 2

NTE: and pharmaceutically acceptable and unacceptable salts

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 7 MARPAT COPYRIGHT 2002 ACS

L8 ANSWER 7 OF 7
ACCESSION NUMBER:
TITLE:

132:260702 MARPAT
Tetracycline derivatives for inhibition of cataract
formation
INVENTOR(S):
RYAD, Maria Emanuel; Golub, Lorne M.; Ramamurthy,
Nungavaram S.

PATENT ASSIGNEE(S):
The Research Foundation of State University of New
York, USA
PCT Int. Appl., 38 pp.
COODEN: PIXXD2

DOCUMENT TYPE:
LANGUAGE:
PATENT NO.

PATENT NO.

KIND DATE

APPLICATION NO. DATE

PATENT NO.

WO 2000018353
A2 20000406
WO 1999-US22354 19990928
WO 2000018353
A3 20000706
W: AE, AL, AL, AM, AT, AL, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LK, LS, LT, LU, LV,
BM, KG, KZ, MD, RU, TJ,
BW, KG, KZ, MD, RU, TJ,
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
CG, CI, CM, GA, GM, GW, ML, MR, NE, SN, TD, TG

FIGHTS ABOUT ABOUT TO A STATE OF THE APPLICATION NO.

PRIORITY APPLN: INFO:

US 1998-102056P 19980928
WO 1999-US22354 19990928
AB Methods of reducing the risk of cataract development in a mammal are
provided and include administering to the mammal an effective amt. of a
tetracycline deriv. A preferred tetracycline deriv.

ADDITIONAL TRANSPORTED TO AND ACT OF THE APPLICATION NO.

DATE

TOTAL TRANSPORTED TO ACT OF THE APPLICATION NO.

DATE

APPLICATION NO.

MSTR 2

G3 - OH G5 - 46

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L8 ANSWER 7 OF 7 MARPAT COPYRIGHT 2002 ACS (Continued)

G6
46(0)-CH—NH2

G7 = 51

HB—OH

DER: and pharmaceutically acceptable and unacceptable salts MPL: claim 16
MPL: claim 16
musticution is restricted
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09/234,847 Page 9

=> d his

(FILE 'HOME' ENTERED AT 11:30:24 ON 19 MAR 2002)

FILE 'REGISTRY' ENTERED AT 11:30:29 ON 19 MAR 2002

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 5 S L1 FULL

FILE 'USPATFULL' ENTERED AT 11:31:40 ON 19 MAR 2002

L4 0 S L3

FILE 'CAPLUS' ENTERED AT 11:32:05 ON 19 MAR 2002

L5 4 S L3

FILE 'MARPAT' ENTERED AT 11:34:41 ON 19 MAR 2002

L6 1 S L3

L7 8 S L3 FULL

L8 7 S L7/COM

=> d ibib ab

L10 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1966:103979 CAPLUS
DOCUMENT NUMBER: 64:103979 CAPLUS
ORIGINAL REFERENCE NO.: 64:19523b-f,19524a-e
Arylazotetracyclines
INVENTOR(S): Rennhard, Hans H., Stephens, Charles R., Jr.
SOURCE: Charles Pfizer & Co., Inc.
15 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

Page 11

=> d ibib ab 2-5

L10 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1966:103978 CAPLUS DOCUMENT NUMBER: 64:103978 CAPLUS 64:103978

Anidinohydrazones of polycyclic nonaromatic compounds Meyer, Karlheinz; Schuetz, Siegismund; Stoepel, Kurt; Kroneberg, Hans G. Farbenfabriken Bayer A.-G. INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE: DOCUMENT TYPE: 4 pp. Patent LANGUAGE: Unavailable

LANGUAGE: U
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 1211176 19660224 DE 19640402

The title compds. are prepd. from ketones and salts of H2N-NHC(:NN)NHR
(I), and cause increased contractions of heart muscles. Various cardiac responses are described. To a soln. of 50 g. 2,6-decalindiol in 700 ml. CGH6 was added during 4 hrs. at 6.degree. a mixt. of 70 g. Na2Cr207, 50 ml. AcOH, 95 ml. concd. H2SO4, and 310 ml. H2O. The mixt. was stirred 2.5 hrs., let stand overnight at room temp., and sepd. The org. layer was vashed, dried, and evapd. to give 2,6-decalindione (II). A soln. of 6-MecIOH()CONHOGH-2 (III). A soln. of 28 g. III in 300 ml. AcOH was treated with a soln. of 18 g. Cr03 in 500 ml. 95% AcOH. After 12 hrs., the mixt. was poured into 10 l. of H2O and extd. with CHCl3. The exts. were washed, dried, and distd. to give 15 g. 6-acetyl-2-decalone (IV), b0.1 121.degree. A mixt. of 1 g. 3-oxo-7-methoxy-1, 2, 3, 9, 10, 11-hexahydrophenanthrene, 30 mg. 4-MecGH4SO3H, and 20 ml.
2-methyl-2-ethyl-1,3-dioxolane was heated 6 hrs. to distil out 8 ml. butanone, the residue was chromatographed on Al203 and the CGH6 eluted to give 700 mg. 3,3-ethylenedioxy-7-methoxy-1, 2,3,4,9,10-hexahydrophenanthrene (V), m. 73.degree. Birch redn. of V and acid cleavage of the resulting enol ether gave 2,6-dioxo-1,2,3,4,6,7,8,9,10,14-decahydrophenanthrene (V), m. 73.degree. Birch redn. of V and acid cleavage of the resulting enol ether gave 2,6-dioxo-1,2,3,4,6,7,8,9,10,14-decahydrophenanthrene (VI), m. 73.degree. Birch redn. of V and acid cleavage of the resulting enol ether gave 2,6-dioxo-1,2,3,4,6,7,8,9,10,14-decahydrophenanthrene (VI), m. 73.degree. Birch redn. of V and acid cleavage of the resulting enol ether gave 2,6-dioxo-1,2,3,4,6,7,8,9,10,14-decahydrophenanthrene (VI), m. 73.degree. Birch redn. of V and acid cleavage of the resulting enol ether gave 2,6-dioxo-1,2,3,4,6,7,8,9,10,14-decahydrophenanthrene (VI), m. HEXCO3, 210.degree. (decompn.), mouse toxicity (intravenous) is 12.5-16 mg./kg. Compds. similarly prepd. are tabulated. a: 2,11-di

L10 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1964:16523 CAPLUS
ORIGINAL REFERENCE NO.: 60:2875b-e Halottracycline-6,12-hemiketals
INVENTOR(S): Halottracycline-6,12-hemiketals
Blackwood, Robert K.; Rennbard, Hans H.; Beereboom, John J.; Stephens, Charles R., Jr.
PATENT ASSIGNEE(S): 9 np. 1; Stephens, Charles R., Jr.
9 np. 9

PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: PATENT INFORMATION: 9 pp. Patent Unavailable

NT INFORMATION:

PATENT NO. XIND DATE APPLICATION NO. DATE

"Tetracyclines are treated with a halogenating agent, such as CIFO3 or N-chlorosuccinimide, to give the title compds., which can be used as antibiotics. Thus, a suspension of 20 g, tetracycline base in 800 ml. H20 is cooled to 0.degree., 45 ml. 2N NaOH is added, CIFO3 bubbled through the mixt. (which is under N) until the pH is .apprx.7, excess CIFO3 eliminated with a stream of W, and the ppt. obtained filtered off, washed with H2O, and dried in vacuo at room temp. to give 7.9-8.5 g, 11a-fluorotetracycline 6,12-hemiketal, lambda. 267 and 340 m.mu. Similarly prepd. are the following I (R, X, X', X'', and Y given): Me, F, H, H, OH, lambda. 265 and 336 m.mu., Me, Cl, H, H, H, lambda. 267 and 340-342 m.mu., Me, Cl, Cl, H, H, H, lambda. 267 and 340-342 m.mu., Me, Cl, Cl, H, H, H, lambda. 267 and 340-342 m.mu., Me, Cl, Cl, H, HR, H, D, H, infrared 6.12, 6.35, 6.66, 6.85, 7.22, 7.55, 7.75, 7.92, 8.14, 8.36, 8.78, 9.18, and 9.31, mu., Me, F, H, NO2, H, Me, F, H, HIZ, H, Me, F, H, HOONH, H, Me, F, H, ACNH, H, Me, F, Cl, NO2, H, H, Cl, H, NH2, H, Me, Cl, H, NH2, OH, Me, Cl, H, NH2, OH, Also prepd. are 9-nitro-11-chloro-6-deoxy-6-demethyl-6-methylenet-5-oxytetracycline, 5-hydroxy-9-aminotetracycline (II), II-HE, II-HCl (infrared 5.70 mu.), 11a-fluoro-6-demethyl-6-methylenetetracycline perchlorate, 6-deoxy-6-demethyl-6-methylenetetracycline perchlorate, 6-demethyl-7-chloro-9-aminotetracycline, 6-demethyl-9-aminotetracycline.

L10 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1964:661534 CAPLUS ODCUMENT NUMBER: 61:61534 ORIGINAL REFERENCE NO.: 61:106368-C

Anthraquinone derivatives Hopff, Heinrich: Bollinger, Walter: Wick, Arnold J. R. Geigy A.-G. 3 pp. Patent TITLE: INVENTOR(S):

INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE: Unavailable

LANGUAGE: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

GB 957150 19640506 GB 19630105
Ring closure of o-(pentaethylbenzoyl)benzoic acid (1) and oxidn. of the product gives 5,6.7,8-tetraethylanthraquinone-1-carboxylic acid (11). Thus, I 6 in SOC1235 was boiled 4 hrs., the soln. evapd., the residue in CS2 35 treated with Alc13 4.5, the mixt. stirred 3 hrs., then refluxed 1 hr., and treated with IC1-HC1, Et20-extd., and the ext. washed with 5 .times. 150 ml. 0.53 NaOH soln., acidified, and evapd. to give 5,6.7,8-tetraethyl-10-methylanthracene-1-carboxylic acid (111) 2 parts, m. 179-95.degree. (Et0Ac-petr. ether). III 2 and K2C207 24 in AcoH 200 parts was refluxed 2 hrs. Evapn. and extn. with 0.5N NaOH gave the Na salt of II; acidification gave II, m. 240.degree. (EtOAc or AcOH).

L10 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1964:16522 CAPLUS DOCUMENT NUMBER: 60:16522 ORIGINAL REFERENCE NO.: 60:2874h,2875a-b Molecular compounds of oxytetracycline Ogawa, Hiroshi; Inoue, Shigeharu Meiji Confectionary Ltd. TITLE: INVENTOR(S): PATENT ASSIGNEE(S): 5 pp. Patent Unavailable SOURCE: DOCUMENT TYPE: LANGUAGE: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 38017044 19630904 JP 19600318

TO 3.5 cc. aq. suspension of 500 mg. oxytetracycline-H2O is added 0.15 cc. 501 H2504, oxalic acid dihydrate added, and the mixt. kept overnight to give 470 mg. mol. compd. of oxytetracycline sulfate with oxalic acid, plates, m. 152-3.degree. (decompn.). Similarly prepd. are the following mol. compds. of oxytetracycline salts with org. substance (name of salt, org. compd., appearance, and m.p. given): hydrochloride, oxalic acid, --, 145-7.degree.; sulfate, pyrazine, --, 177-8.degree.; hydrochloride, pyrazine, --, 166-8.degree.; sulfate, knoh, needles, --; sulfate, fumaric acid, plates, --; sulfate, fumaric acid, plates, --; sulfate, clcH2CO2H, needles, --; sulfate, succinic acid, needles, --.

=> d his

(FILE 'HOME' ENTERED AT 11:30:24 ON 19 MAR 2002)

FILE 'REGISTRY' ENTERED AT 11:30:29 ON 19 MAR 2002

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 5 S L1 FULL

FILE 'USPATFULL' ENTERED AT 11:31:40 ON 19 MAR 2002

L4 0 S L3

FILE 'CAPLUS' ENTERED AT 11:32:05 ON 19 MAR 2002

L5 4 S L3

FILE 'MARPAT' ENTERED AT 11:34:41 ON 19 MAR 2002

L6 1 S L3

L7 8 S L3 FULL

L8 7 S L7/COM

FILE 'CAOLD' ENTERED AT 11:37:47 ON 19 MAR 2002

L9 3 S L3

FILE 'CAPLUS' ENTERED AT 11:38:01 ON 19 MAR 2002

FILE 'CAOLD' ENTERED AT 11:38:18 ON 19 MAR 2002 SEL AN 1-

FILE 'CAPLUS' ENTERED AT 11:38:36 ON 19 MAR 2002 L10 5 S E1-E3/OREF

FILE 'BEILSTEIN' ENTERED AT 11:39:37 ON 19 MAR 2002 L11 0 S L1 FULL

FILE 'REGISTRY' ENTERED AT 11:40:35 ON 19 MAR 2002

09/234,847 Page 2

L6 ANSWER 1 OF 4 USPATFULL
ACCESSION NUMBER:
TITLE:
9- (substituted amino) -alpha-6-deoxy-5-oxy
tetracycline derivatives, their preparation and their
use as antibiotics
INVENTOR(S):
SU, Wei-guo, New London, CT, United States
PATENT ASSIGNEE(S):
(corporation)

NUMBER 19981110 19950824 19960722 19950112 19960722 19960722 US 5834450 WO 9522529 US 1996-682640 WO 1995-IB26 PATENT INFORMATION: APPLICATION INFO.: (8)

DOCUMENT TYPE:

Utility Granted Lambkin, Deborah C. Richardson, P. C., Ginsburg, P. H., Appleman, Jolene W. FILE SEGMENT:
PRIMARY EXAMINER:
LEGAL REPRESENTATIVE:
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:

EXPRIARY CLAIM: 1
LINE COUNT: 1136
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to compounds of the formula ##STRI## wherein R.sup.1, R.sup.2 and R.sup.3 are defined as in the specification and the pharmaceutically acceptable salts of such compounds. Compounds of the formula I exhibit antibiotic activity against a wide range of gram-positive and gram-negative organisms, including organisms that are resistant to tetracycline antibiotics.

IT 161320-58-7
(preph. of aminoacylaminedovycylines)

161320-58-7 (prepn. of aminoacylaminodoxycyclines)
161320-58-7 USPATFULL
2-Naphthacenecarboxamide, 4-{dimethylamino}-9[[(dimethylamino) acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

L6 ANSWER 1 OF 4 USPATFULL (Continued)

●2 HC1

L6 ANSWER 1 OF 4 USPATFULL (Continued)
17 171807-98-0P 171807-99-1P, 9-Aminodoxycycline dihydrochloride (prepn. of aminoacylaminodoxycyclines)
RN 171807-98-0 USPATFULL
C 2-Naphthacenecatboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12e-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-nitro-1,11-dioxo-, [45-(4.a]pha.,4a.a]pha.,5.a]pha.,5.a.lpha.,6.alpha.,12a.alpha.)}-, sulfate (2:1) (salt) (SCI) (CA INDEX NAME) CRN 120793-45-5 CMF C22 H23 N3 010 CDES 1:452:4A,4AA,5A,5AA,6A,12AA Absolute stereochemistry. OH н н CM 2 CRN 7664-93-9 CMF H2 O4 S 171807-99-1 USPATFULL

2-Naphthacenecarboxamide, 9-amino-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,dihydrochloride, [45-{4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)- (GCI INDEX NAME) Absolute stereochemistry.

L6 ANSWER 2 OF 4 USPATFULL

ACCESSION NUMBER:

97:51989 USPATFULL

9-[(substituted glycyt) amido]-6-(substituted)-5-hydroxy-6-deoxytetracyclines

Lee, Ving Jick, 19 Shuart Rd., Monsey, NY, United

States 10952

Buckwalter, Brian Lee, 102 Ovington Rd., Yardley, PA,
United States 19067

Barden, Timothy Claude, 3424 Stafford Pl., Holland, PA,
United States 18966 NUMBER KIND DATE

US 5539742 19970617
US 1994-297464 19940829 (8)
Division of Ser. No. US 1993-42302, filed on 2 Apr 1393, now patented, Pat. No. US 5371076
Utility Granted Gerstl, Robert 72 PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: FILE SEGMENT: PRIMARY EXAMINER: NUMBER OF CLAIMS: EXEMPLARY CLAIM: FILE SEGMENT: Granted
PRIMARY EXAMINER: Gerstl, Robert
NUMBER OF CLAIMS: 72
EXEMPLARY CLAIM: 1
LINE COUNT: 2551
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compounds of the formula: ##STRI## wherein R,
R.Jup.1, R.Jup.2 and W are defined in the specification. These compounds
are useful as antibiotic agents.

IT 161320-23-6p 161320-24-7p 161320-25-0p
161320-23-6p 161320-27-0p 161320-25-0p
161320-23-0p 161320-33-0p 161320-34-0p
161320-33-0p 161320-33-0p 161320-34-0p
161320-33-0p 161320-33-0p 161320-34-0p
161320-41-0p 161320-45-2p 161320-47-0p
161320-41-0p 161320-45-2p 161320-45-0p
161320-41-0p 161320-45-2p 161320-45-0p
161320-51-0p 161320-51-0p 161320-52-1p
161320-55-0p 161320-51-0p 161320-55-4p
161320-55-0p 161320-51-0p 161320-55-4p
161320-55-0p 161320-63-4p 161320-65-2p
161320-55-0p 161320-63-4p 161320-64-5p
161320-55-0p 161320-63-4p 161320-64-5p
161320-55-0p 161320-63-4p 161320-64-5p
161320-55-0p 161320-63-4p 161320-67-0p
161320-65-0p 161320-65-0p 161320-67-0p
161320-65-0p 161320-65-0p 161320-67-0p
161320-71-0p 161320-69-0p 161320-71-0p
161320-71-0p 161320-69-0p 161320-71-0p
161320-71-0p 161320-69-0p 161320-08-0p
161320-81-0p 161320-81-0p 161320-09-1p
161320-95-9p 161320-09-0p 161320-08-0p
161320-95-9p 161320-09-0p 161320-09-1p
161320-95-9p 161321-01-09 161321-00-0p
161321-01-0p 161321-10-5p 161321-00-0p
161321-10-0p 161321-10-5p 161321-10-0p
161321-11-1p 161321-11-5p 161321-11-5p
(prepn. of 9-[(N-substituted-glycyl) amido]-6-methyl(ene)-5-hydroxy-6deoxytetracyclines as antibiotics)

NN 161320-23-6 USPATFULL

ANSWER 2 OF 4 USPATFULL (Continued)
1-Piperidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-, [5R-(5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alp
ha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-24-7 USPATFULL
1-Piperidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-, dihydrochloride, [5R[5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alpha.,10a.alpha.]- (9CI) (CA
INDEX NAME)

●2 HC1

161320-25-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-9-[[(methylamino)acetyl)amino]-1,11dioxo-, dihydrochloride, [45-(d.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.al
pha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL (Continued)

161320-28-1 USPATFULL

1-Piperidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl)-4-methyl-[5R-(5,a]pha.,5a.alpha.,6a.alpha.,6a.alpha.,7alpha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-29-2 USPATFULL

1613/0-29-2 USFATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9[[[propy]lamino]acetyl]amino]-, dihydrochloride, [4s(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

161320-30-5 USPATFULL
2-Naphthacenecarboxamide, 9-[[(butylamino)acetyl]amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, [4S-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]-

ANSWER 2 OF 4 USPATFULL

●2 RC1

161320-26-9 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[(ethylamino)acetyl]amino]1.4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, dihydrochloride, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6a.l
pha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-27-0 USPATFULL
1-Pyrrolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5, Sa, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]-, iSR-(5. alpha., 5a. alpha., 6. alpha., 6a. alpha., 7. alp
ha., 10a. alpha.)]- (9C1) (CA. HOMEX MAME)

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

161320-31-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[{2-(dimethylamino)-1-oxopropyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-32-7 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydrowy-6-methyl-1,11-dioxo-9[[(pentylamino)acetyl]amino]-, monohydrochloride, [4s-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6a.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HC1

161320-33-8 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[(dimethylamino)acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (45,4aR,5s,5aR,6R,12aS)-

ANSWER 2 OF 4 USPATFULL (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry

161320-34-9 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9[{(phenylmethyl)amino|acetyl|amino|-, dihydrochloride,
[45-(4-alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

161320-35-0 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydrosy-6-methyl-1,11-dioxo-9-[[[(2-thienylmethyl)amino]acetyl]amino]-, dihydrochloride,
[(5-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 2 OF 4 USPATFULL (Continued)

●2 HC1

161320-38-3 USPATFULL 2-Naphthacenecarboxamide, 9-[[(diethylamino)acetyl]amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-39-4 USPATFULL
1-Pyrrolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5, 5a, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl)-2-methyl-, [5R-[2(R*), 5.a]pha., 5a.alpha., 6.alpha.,
6a.alpha., 7.alpha., 10a.alpha.])- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-40-7 USPATFULL 2-Naphthacenecarboxamide, 9-{{{(cyclopropylmethyl) amino} acetyl] amino}-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-

L6 ANSWER 2 OF 4 USPATFULL (Continued)

●2 HC1

161320-36-1 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[(2-methylpropyl)amino]acetyl]amino]-1,11-dioxo-, dihydrochloride, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-37-2 USPATFULL

161320-37-2 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9-[[[(2pyridinylmethyl)amino]acetyl)amino]-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL (Continued)
pentahydroxy-6-methyl-1, 11-dioxo-, dihydrochloride, {4S(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

●2 HC1

161320-41-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino) -9-{{{[(1,1-dimethylethyl) amino] acetyl} amino} -1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, {4s-dipha.,4a.alpha.,5.alpha.,5a.alpha.,6a.alpha.,12a.alpha.)} - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-42-9 USPATFULL

Carbamic acid, [2-{[9-(aminocarbonyl)-7-(dimethylamino)5.5a, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester,
[5R-(5.alpha.,5a.alpha.,6.alpha.,6.alpha.,7.alpha.,10a.alpha.)]- (9CI)
(CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

161320-43-0 USPATFULL

2-Naphthacenecarboxamide, 9-[{aminoacety1}amino]-4-(dimethylamino)1.4.4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)](9C1) (CA INDEX NAME)

Absolute stereochemistry.

161320-44-1 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[(4-methyl-2-(methylamino)-1-oxopentyl)amino)-1,11-dioxo-, [45-[4.alpha,,4a.alpha,5a.alpha,5a.alpha],6.alpha,9(R*),12a.alpha],9(ST) (CA INDEX NAME)

Absolute stereochemistry.

161320-45-2 USPATFULL

10120-43-2 USFAIRULD
Pentanoic acid, 4-amino-5-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl] amino]-5-oxo-, [5R-[2(5*),5.alpha.,5a.alpha.,6.alph
a.,6a.alpha.,7.alpha.,10a.alpha.]]- [9C1] (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

Absolute stereochemistry.

161320-49-6 USPATFULL
2-Naphthacenecarboxamide, 9-{(2-amino-3-cyclohexyl-1-oxopropyl)amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,(45-[4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,9(R*),12a.alpha.]]- (9CI) (CA INDEX NAME)

161320-50-9 USPATFULL
2-Naphthacenecarboxamide, 9-[{2-amino-4-methyl-1-oxopentyl}amino}-4(dimethylamino)-1,4,4a,5,5a,6,1l,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [48-[4.alpha.,4.a.lpha.,5.alpha.,5.alpha.,5.alpha.,9(R'),12a.alpha.}]- (9CI) (CA INDEX NAME)

161320-51-0 USPATFULL
Pentanediamide, 2-amino-N1-[9-(aminocarbonyl)-7-(dimethylamino)5.5a, 6.6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]-, [5R-[2(\$*), 5.alpha, 5a.alpha, 6.alpha, 6a.alpha,
,7.alpha,,10a.alpha,]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 2 OF 4 USPATFULL (Continued)
Absolute stereochemistry.

161320-46-3 USPATFULL
Butanoic acid, 3-amino-4-{{9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)amino]-4-oxo-, [5R-[2(5*),5.a]pha.,5a.alpha.,6.alph
a.,6a.alpha.,7.alpha.,10a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-47-4 USPATFULL 2-Naphthacenecarboxamide, 9-[(2-amino-1-oxo-3-phenylpropyl)amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [45-[4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,9(S*),12a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-48-5 USPATFULL

2-Naphthacenecarboxamide, 9-[(2-amino-1-oxo-3-phenylpropyl) amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [4S-[4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,5alp

ANSWER 2 OF 4 USPATFULL

161320-52-1 USPATFULL
2-Pyrrolidinecarboxamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-, [5R-[2(5*),5.alpha,5a.alpha,6.alpha,6.alpha,
,7.alpha,,10a.alpha]]- (9CI) (CA INDEX NAME)

161320-53-2 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-1-oxo-3-phenylpropyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [4S-[4.a]pha.,4.a.a]pha.,5.alpha.,5.alpha.,5.alpha.,5.alpha.,6.alpha.,9.(R*),12a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-54-3 USPATFULL
2-Maphthacenecarboxamide, 9-[[2-amino-3-(4-hydroxyphenyl)-1oxopcopyl]amino]-4-(dimethylamino)-1, 4, 4a, 5, 5a, 6, 11, 12a-octahydro3,5, 10, 12, 12a-pentahydroxy-6-methyl-1, 11-dioxo-, [45(4.alpha., 4a.alpha., 5a.alpha., 5a.alpha., 6.alpha., 9(R*), 12a.alpha.]](9C1) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-55-4 USPATFULL
2-Maphthacenecarboxamide, 9-[(2,6-diamino-1-oxohexy1)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, (45-[4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,5.alpha.). (32)
[Alpha.,6.alpha.,9(R),12a.alpha.]- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

161320-56-5 USPATFULL
1H-Indole-3-propanamide, .alpha.-amino-N-[9-{aminocarbony1}-7-(dimethylamino)-5, s6, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12-dioxo-2-naphthacenyl)-, [SR-[2(S*), 5.alpha., 5a.alpha., 6.alpha., 6a.alpha., 7.alpha., 10a.alpha.]]-(SC1) (CA INDEX NAME)

Absolute stereochemistry.

161320-57-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[[(dimethylamino)acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-

ANSWER 2 OF 4 USPATFULL (Continued)

161320-60-1 USPATFULL
2-Naphthacenecarboxamide, 9-[[[(cyclopropylmethyl)amino]acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.a
lpha.,6.alpha.,12a.alpha.)]- (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

161320-61-2 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[(dimethylamino) acetyl]amino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 161320-33-8 CMF C26 H32 N4 09 CDES 1:452:4A,4AA,5A,5AA,6A,12AA

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL (Continued)
3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride,
[4S-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

• HC1

161320-58-7 USPATFULL
2-Naphthacenecarboxanide, 4-(dimethylamino)-9[(dimethylamino) acecyl] anino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

●2 HCl

161320-59-8 USPATFULL
4-Morpholineacetamide, N-{9-{aminocarbonyl}-7-{dimethylamino}-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-, [5R-{5.alpha.,6.alpha.,6.alpha.,6.alpha.,7.alpha.,10a.alpha.}]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL CM 2 (Continued)

161320-62-3 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-1-oxopropyl]amino]-1, 4, 4a, 5, 5a, 6, 11, 12a-octahydro-3, 5, 10, 12, 12a-pentahydroxy-6-methyl-1, 11-dioxo-, monohydrochloride (9CI) (CA INDEX NAME)

• HC1

161320-63-4 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[(dimethylamino) acetyl] amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-N-(1-pyrrolidinylmethyl)-,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)][9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-64-5 USPATFULL

2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[{(hexylamino)acetyl]amino]1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, dihydrochloride, [45-(4.alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.al
pha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

Absolute stereochemistry.

●2 HC1

161320-65-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydrosy-9-[[(methoxyamino)acetyl]amino]-6-methyl-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]-(9C1) (CA INDEX NAME)

Absolute stereochemistry.

161320-66-7 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9[[([phenylmethoxy]amino]acetyl]amino]-, [45(4.alpha,,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL (Continued)

161320-70-3 USPATFULL

2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-9-[[(hydroxyamino)acetyl]amino]-6-methyl-1,11-dioxo-, [4S-(4.alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]-(9CI) (CA INDEX NAME)

Absolute stereochemistry

161320-71-4 USPATFULL
2-Naphthacenecarboxsmide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[methyl(phenylmethyl)amino]acety
1]amino]-1,11-dioxo-[(45-(4.alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.alpha
.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-72-5 USPATFULL 2.5-Diazabicyclo[2.2:1]heptane-2-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-5-methyl-[9CI] (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

161320-67-8 USPATFULL
1H-Pyrazole-1-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-4-ethyl-, [SR-(5,alpha.,5a.alpha.,6.alpha.,6a.alph
a.,7.alpha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-68-9 USPATFULL
2-Naphthacenecarboxamide, 9-{[[(cyclobutylmethyl)amino]acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [4S-(4.alpha.,4a.alpha.,5.alpha.,5a.a
lpha.,6.alpha.,12a.alpha.)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-69-0 USPATFULL 2-Naphthacenecarboxamide, 9-[[(2-butenylamino)acetyl]amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-73-6 USPATFULL

4-Morpholineacetamide, N-{9-{aminocarbonyl}-7-{dimethylamino}-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl}-3-methyl- (9CI) (CA INDEX NAME)

161320-74-7 USPATFULL 2-Azabicyclo[2.2.1] heptane-2-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]- (9CI) (CA INDEX NAME)

161320-75-0 USPATFULL
2-Azabicyclo[2.2.2] octane-2-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-, [5A-(5.alpha.,5a.alpha.,6a.alpha.,6a.alpha.,7.alpha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-76-9 USPATFULL
1-Piperazinecarboxamide, N-{9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-, [5R-(5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alp
ha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-77-0 USPATFULL

161320-77-0 USPATFULL
P-Pjerazzinaceatanide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-4-hydroxy-, [5R-(5.alpha.,5a.alpha.,6.alpha.,6a.al
pha.,7.alpha.,10a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-78-1 USPATFULL
1-Piperazineacetamide, N-{9-{aminocarbonyl}-7-{dimethylamino}5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl}-3-methyl- (9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL

161320-82-7 USPATFULL

L-Alanine, N-[2-[9-(aminocarbonyl)-7-(dimethylamino)5,5a.6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-2-oxoethyl]-, [5R(5.alpha.,5a.alpha.,6.alpha.,6.alpha.,7a.alpha.,10a.alpha.)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

.
161320-83-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[(2-methylcyclopropyl) oxy]amino]acetyl]amino]-1,11-dioxo- [9CI] (CA INDEX NAME)

161320-84-9 USPATFULL 2-Naphthacenecarboxamide, 9-[[[(bicyclo[2.2.2]oct-2-yloxy) amino] acetyl] maino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-79-2 USPATFULL
4-Thiomorpholineacetamide, N-{9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-3-cyclopropyl- (9CI) (CA INDEX NAME)

161320-80-5 USPATFULL

1H-Pyrrole-1-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-3-ethyl-, [SR-(5.alpha.,5a.alpha.,6.alpha.,6.alpha
a,7.alpha.,10a.alpha.]]- [OCI) (CA INDEX NAME)

Absolute stereochemistry.

161320-81-6 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydrosy-9-[[(1H-imidazol-2-ylmethyl)amino]acetyl]amino]-6-methyl-1,11-dioxo-, (45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-85-0 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[3-methyl-2-butenyl)amino]acetyl]amino]-1,11-dioxo-, [4S-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6a.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-86-1 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[[4-{(2-methyl-1-oxopropy!)amino]phenyl]amino]acetyl]amino]-1,11-dioxo-,[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

ANSWER 2 OF 4 USPATFULL (Continued)

PAGE 1-B

-Pr-i

161320-87-2 USPATFULL
1-Pyrrolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl}-3-ethyl- (9CI) (CA INDEX NAME)

161320-88-3 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[2-[[(1-methyl-1H-imidazol-2-yl)methyl]amino]-1-oxopropyl)amino]-1,11-dioxo-(9C1) (CA INDEX NAME)

161320-89-4 USPATFULL
2-Naphthacenecarboxamide, 9-[[2-(dicyclopropylamino)-1-oxopropyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-93-0 USPATFULL
1-Piperidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-4-(aminomethyl)-.alpha.-methyl- (9CI) (CA INDEX NAME)

161320-94-1 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[2-[[3-(methylsulfonyl)phenyl]amino]-1-oxopropyl]amino]-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-95-2 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-9-{[2-(dimethylamino)-2-methyl-1-0xopropyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 2 OF 4 USPATFULL (Continued)

161320-90-7 USPATFULL
1-Piperazineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-4-methoxy-.alpha.-methyl- (9CI) (CA INDEX NAME)

161320-91-8 USPATFULL

161320-91-8 USPATFULL
4-Thiomorpholineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-.alpha.,2-dimethyl- (9CI) (CA INDEX NAME)

161320-92-9 USPATFULL
Carbamic acid, [2-[[9-(aminocarbonyl)-7-(dimethylamino)5,8a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]aminol-1-methyl-2-oxoethyl]-, 2-propenyl ester
(9C1) (CA INDEX MAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-96-3 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-entahydroxy-6-methyl-9-[[2-methyl-2-(methylamino)-1-oxopropyl]amino]-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-97-4 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-9-[[2-[[(3methyleyclobutyl)oxy]amino]-1-oxobutyl]amino]-1,11-dioxo- (9CI) (CA
INDEX NAME)

161320-98-5 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-[(1,1-dimethylethyl)methylamino]-1-oxobutyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (9CI) (UNDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161320-99-6 USPATFULL
2-Isoxazolidineacetamide, N-{9-(aminocarbonyl)-7-(dimethylamino)-5,Sa,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-.alpha.-ethyl-4-methyl- (9CI) (CA INDEX NAME)

161321-00-2 USPATFULL
4H-1,2,4-Triazole-4-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-.alpha.-ethyl-3-methyl- (9CI) (CA INDEX NAME)

161321-01-3 USPATFUL;
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-3,3-dimethyl-1-oxobutyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161321-05-7 USPATFULL

2-Naphthacenecarboxamide, 9-([2-(diethylamino)-3-mercapto-1-oxopropyl]amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (901) (CA INDEX NAME)

161321-06-8 USPATFULL
1-Piperazineacetamide, N-[9-{aminocarbonyl}-7-{dimethylamino}5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-.alpha.-(mercaptomethyl)- (9CI) (CA INDEX NAME)

161321-07-9 USPATFULL
Butanoic acid, 4-[{9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl)amino]-3-(hexylamino)-4-oxo-(9CI) (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

$$\begin{picture}(20,0) \put(0,0){\line(1,0){100}} \put(0,0){\line(1,0){100$$

161321-02-4 USPATFULL 2-Naphthacenecarboxanide, 4-(dimethylamino)-9-[[2-(ethylamino)-2-methyl-1-oxobutyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-03-5 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-{{2-(dimethylamino)-3-hydroxy-1-oxopropylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-04-6 USPATFULL
1H-Imidazole-1-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5, 5a, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]-.alpha.-(hydroxymethyl)-4-methyl- (9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL

161321-08-0 USPATFULL 2H-1, 2-0xazine-2-propanoic acid, 4-[[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]amino]tetrahydro-6-(hydroxymethyl)- (9CI) (CA INDEX NAME)

161321-09-1 USPATFULL
Butanoic acid, 4-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-3-[ethyl(phenylmethyl)amino]-4-oxo-(9CI)
(CA INDEX NAME)

161321-10-4 USPATFULL
Pentanoic acid, 5-{[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-4-(cyclopropylamino)-5-oxo-(9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161321-11-5 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[{(dimethylamino)phenylacetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (9CI) (CA INDEX NAME)

161321-12-6 USPATFULL

1013/21-12-0 DOARFULL 2-Naphthacenecarboxamide, 9-[[(butylamino) (4-hydroxyphenyl) acetyl] amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9C1) (CA INDEX NAME)

161321-13-7 USPATFULL

101221-13-7 Use India Company (1917)
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[(dimethylamino) (4methoxyphenyl)acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dixon-(9C1) (CA INDEX NAME)

L6 ANSWER 2 OF 4 USPATFULL (Continued)

IT 161321-16-0P 161321-17-1P 161321-18-2P
161321-19-3P 161321-20-6P 161321-21-7P
161321-22-6P 161321-23-9P 161321-24-0P
161321-25-1P 161321-26-2P 161321-37-3P
161321-25-4P 161321-29-5P 161321-30-6P
161321-31-9P 161321-32-9P 161321-33-0-8P
(prepn. of 9-[(N-substituted-glycyl)amido]-6-methyl(ene)-5-hydroxy-6-deoxytetracyclines as antibiotics)
RN 161321-16-0 USPATFULL
CN 2-Naphthacenecarboxamide, 9-[(bromoacetyl)amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161321-17-1 USPATFULL
2-Naphthacenecarboxamide, 9-[(bromoacety1)amino]-4-(dimethylamino)1,4,4,5,5,4,6,11,12-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, monohydrobromide, (45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,5.alpha.,6.alpha.,5.alpha.)

Absolute stereochemistry.

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161321-14-8 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[(ethylmethylamino)[4-(trifluoromethyl)phenyl]acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (9CI) (CA INDEX NAME)

161321-15-9 USPATFULL

2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[[4-(dimethylamino)phenyl](2-propenylamino)acetyl]amino]1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-(9CI) (CAINDEX NAME)

IT 161321-34-2

lei321-34-2
(prepn. of 9-[(N-substituted-glycyl)amido]-6-methyl(ene)-5-hydroxy-6deoxytetracyclines as antibiotics)
161321-34-2 USPATFULL
2-Naphthacenecarboxamide, 9-amino-4-(dimethylamino)-1,4,4a,5,5a,6,1l,12aoctahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,1l-dioxo-,
(45,4aR,55,5aR,6R,12a5)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 2 OF 4 USPATFULL (Continued)

161321-18-2 USPATFULL
2-Naphthacenecarboxamide, 9-{(chloroacetyl)amino}-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, monohydrochloride, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.
alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

• HC1

161321-19-3 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-bromo-1-oxopropyl)amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

• нвг

161321-20-6 USPATFULL
2-Naphthacenecarboxamide, 9-[(bromoscetyl)amino]-4-(dimethylamino)1.4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, {4S-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}, sulfate (2:1) (salt) (9CI) (CA INDEX NAME)

CRN 161321-16-0 CMF C24 H26 Br N3 09 CDES 1:452:4A,4AA,5A,5AA,6A,12AA

L6 ANSWER 2 OF 4 USPATFULL (Continued)

2 CM

CRN 7664-93-9 CMF H2 O4 S

RN 161321-21-7 USPATFULL
CN 2-Naphthacenecarboxamide, 9-[(2-bromo-2-methyl-1-oxopropyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide,
[45-(4,alpha,4a,alpha,,5.alpha,,5a,alpha,,6.alpha,,12a,alpha,)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

• HBr

161321-22-8 USPATFULL

2-Naphthacenecarboxamide, 9-[(2-bromo-1-oxobutyl)amino]-4-(dimethylamino)-1.4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

• HBr

161321-25-1 USPATFULL
2-Maphthacenecarboxamide, 9-[(2-bromo-3-hydroxy-1-oxopropyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

161321-26-2 USPATFULL
2-Naphthacenecarboxanide, 9-[(2-bromo-3-mercapto-1-oxopropy1)amino]-4(dimethylamino)-1, 4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

• нвг

161321-23-9 USPATFULL 2-Naphthacenecarboxamide, 9-[(2-bromo-1-oxopentyl) amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

• нвг

161321-24-0 USPATFULL
2-Maphthacenecarboxanide, 9-[(2-bromo-2-methyl-1-oxobutyl)amino]-4(dimethylamino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX
NAME)

ANSWER 2 OF 4 USPATFULL (Continued)
161321-27-3 USPATFULL
Eutanoic acid, 4-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-3-bromo-4-oxo-, monohydrobromide (9CI) (CA
INDEX NAME)

• HBr

161321-28-4 USPATFULL
Pentanoic acid, 5-{{9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl}amino}-4-bromo-5-oxo-, monohydrobromide (9CI) (CA INDEX NAME)

• HBr

161321-29-5 USPATFULL 2-Maphthacenecacboxamide, 9-[(bromophenylacetyl)amino]-4-(dimethylamino)--1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9C1) (CA INDEX NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

• HBr

161321-30-8 USPATFULL
2-Naphthacenecarboxamide, 9-{{bromo(4-hydroxyphenyl)acetyl}amino}-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

• HBr

161321-31-9 USPATFULL

161321-31-9 USPATFULL
2-Naphthacenecarboxamide, 9-[[bromo(4-methoxyphenyl)acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX
NAME)

ANSWER 2 OF 4 USPATFULL (Continued)

• нвг

ANSWER 2 OF 4 USPATFULL

• нвг

161321-32-0 USPATFULL
2-Maphthacenecarboxamide, 9-{[bromo[4-(trifluoromethyl)phenyl]acetyl]amino
]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

• HBr

161321-33-1 USPATFULL

2-Naphthacenecarboxamide, 9-[[bromo[4-(dimethylamino)phenyl]acetyl]amino]4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX
NAME)

L6 ANSWER 3 OF 4 USPATFULL
ACCESSION NUMBER:
TITLE:
94:106775 USPATFULL
9-[(substituted glycyl) amido]-6-(substituted)-5-hydroxy-6-deoxytetracyclines
Lee, Ving J., Monsey, NY, United States
Buckwalter, Brian L., Yardley, PA, United States
Barden, Timothy C., Holland, PA, United States
American Cyanamid Company, Wayne, NJ, United States
(U.S. corporation) NUMBER XIND DATE

| NUMBER | N NUMBER KIND DATE US 5371076
US 1993-42302
Utility
Granted
Gerstl, Robert
Szatkowski, Thomas S.
20

L6 ANSWER 3 OF 4 USPATFULL (Continued)
dioxo-2-naphthacenyl]-, [SR-(S.alpha., Sa.alpha., 6.alpha., 6.alpha., 7.alp
ha., 10a.alpha.)]- [9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-24-7 USPATFULL

1-Piperidineacetanide, N-[9- (aminocarbonyl)-7- (dimethylamino)5, Sa, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]-, dihydrochloride, [5R(5. alpha., 5a. alpha., 6. alpha., 6a. alpha., 7. alpha., 10a. alpha.)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

●2 HC1

161320-25-8 USPATFULL

161320-23-8 UPAIFULI. 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[(methylamino)acetyl]amino]-1,11-dioxo-, dihydrochloride, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL (Continued)

$$\begin{array}{c|c} & & & \\ & & & \\ HO & & & \\ & & & \\ H2N & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ &$$

161320-28-1 USPATFULL
1-Piperidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl-4-methyl-, [5R-(5,a]pha,,5a,a]pha.,6a,alpha.,6a,alp
ha.,7.alpha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-29-2 USPATFULL

1613/20-29-2 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9[[(propylamino)acetyl]amino]-, dihydrochloride, [4S-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

2 HC1

161320-30-5 USPATFULL
2-Naphthacenecarboxamide, 9-[[[butylamino]acetyl]amino]-4-[dimethylamino]
1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]-

ANSWER 3 OF 4 USPATFULL (Continued)

●2 HC1

161320-26-9 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[(ethylamino)acetyl]amino]1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, dihydrochloride, [45-(4.alpha.,4.alpha.,5.alpha.,5.alpha.,6.al
pha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-27-0 USPATFULL
1-Pyrrolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-, [5R-(5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alp
ha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 3 OF 4 USPATFULL (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

161320-31-6 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-1-oxopropyl)amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-32-7 USPATFULL
2-Naphthacenecarboxanide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-penthydrosy-6-methyl-1,11-dioxo-9[[(pentylamino)acetyl]amino]-, monohydrochloride, [45(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HCl

161320-33-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[[(dimethylamino)acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS}-

L6 ANSWER 3 OF 4 USPATFULL (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

161320-34-9 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9[[[(phenylnethyl)amino]-cytlopiamino]-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

161320-35-0 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9-[{[(2-thienylmethyl)amino]acetyl]amino]-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL (Continued)

●2 HC1

161320-38-3 USPATFULL
2-Naphthacenecarboxamide, 9-[[(diethylamino)acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [48-(4.alpha.,4a.alpha.,5.alpha.,5a.al
lpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-39-4 USPATFULL
1-Pyrrolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5.5a, 6.6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl)-2-methyl-, [5R-[2(R*), 5.alpha., 5a.alpha., 6.alpha.,
6a.alpha., 7.alpha., 10a.alpha.]]- (9CI) (CA INDEX NAME)

161320-40-7 USPATFULL 2-Naphthacenecarboxamide, 9-[[[(cyclopropylmethyl)amino]acetyl]amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-

L6 ANSWER 3 OF 4 USPATFULL (Continued)

●2 HC1

161320-36-1 USPATFULL

161320-36-1 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[{2-methylpropyl)amino]acetyl]amino]-1,11-dioxo-, dihydrochloride, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

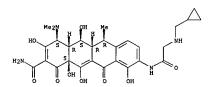
●2 HC1

161320-37-2 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9-[[[(2-pyridinylmethyl)amino]acetyl]amino]-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL (Continued)
pentahydroxy-6-methyl-1,11-dioxo-, dihydrochloride, [45(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.



●2 HC1

161320-41-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[[(1,1-dimethylethyl)amino]acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,(4c)-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-42-9 USPATFULL
Carbamic acid, [2-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-2-oxoethyl]-, 1,1-dimethylethyl ester,
[5R-(5.alpha.,5a.alpha.,6.alpha.,6.alpha.,7.alpha.,10a.alpha.)]- (9CI)
(CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161320-43-0 USPATFULL
2-Naphthacenecarboxamide, 9-[(aminoacetyl)amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, {4S-(4.alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.alpha.,12a.alpha.)](9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-44-1 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[(4-methyl-2-(methylamino)-1-oxopentyl)amino]-1,11-dioxo-, [48-{4.alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.alpha.,9(R*),12a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-45-2 USPATFULL

1013/0-43-z uprafroum
Pentanoic acid, 4-amino-5-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)amino|-5-cov-, [5R-[2(5*),5.a]bpha.,5a.alpha.,6.alph
a.,6a.alpha.,7.alpha.,10a.alpha.]]- (9C1) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL

161320-49-6 USPATFULL
2-Naphthacenecarboxamide, 9-{(2-amino-3-cyclohexyl-1-oxopropyl)amino}-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, (4s-{4.alpha.,4a.alpha.,5.alpha.,5a.a
lpha.,6.alpha.,9(R*),12a.alpha.]}- (9CI) (CA INDEX NAME)

161320-50-9 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-amino-4-methyl-1-oxopentyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [48-{4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,9(R*),12a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-51-0 USPATFULL

Pentanediamide, 2-amino-N1-[9-(aminocarbonyl)-7-(dimethylamino)5.5a,6.6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-, [5R-[2(s*),5.alpha.,5a.alpha.,6.alpha.,6.alpha.,7.alpha.,10a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 3 OF 4 USPATFULL
Absolute stereochemistry. (Continued)

161320-46-3 USPATFULL
Butanoic acid, 3-amino-4-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-4-oxo-, [5R-[2(5*),5.alpha.,5a.alpha.,6.alph
a.,6a.alpha.,7.alpha.,10a.alpha.]]- [9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-47-4 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-amino-1-oxo-3-phenylpropyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [4S-[4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,9(S*),12a.alpha.]}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-48-5 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-amino-1-oxo-3-phenylpropyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydrox,3,6,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [45-[4.alpha.,4a.alpha.,5.alpha.,5.alpha.,5.alpha.,9.alpha.,9.alpha.,9.alpha.]- (9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

161320-52-1 USPATFULL 2-Pyrrolidinecarbon

b1320-52-1 USPATFULL
Pyrrolidinecarboxamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-, [5R-[2(5'),5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alpha.,10a.alpha.])- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-53-2 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-1-oxo-3-phenylpropyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [4S-[4.a]pha.,4a.a]pha.,5.alpha.,5.alpha.,5.a.alpha.,9.(R*),12a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-54-3 USPATFULL
2-Naphthacenecarboxamide, 9-{{2-amino-3-(4-hydroxyphenyl)-1oxopropyl)amino]-4-{dimethylamino}-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,
[4-alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.alpha.,9(R*),12a.alpha.]](SCI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

161320-55-4 USPATFULL
2-Naphthacenecarboxamide, 9-[(2,6-diamino-1-oxohexyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, [4s-{4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,9(R*),12a.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-56-5 USPATFULL

IH-Indole-3-propanamide, .alpha.-amino-N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-, [5R-[2(S*),5.alpha.,5a.alpha.,6.alpha.,6.alpha.,7.alpha.,10a.alpha.]]-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

161320-57-6 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[{(dimethylamino)acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161320-60-1 USPATFULL
2-Naphthacenecarboxamide, 9-[[[(cyclopropylmethyl)amino]acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.a
lpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-61-2 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[[(dimethylamino) acetyl] amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,[45(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]-, sulfate
(1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 161320-33-8 CMF C26 H32 N4 09 CDES 1:452:4A,4AA,5A,5AA,6A,12AA

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL (Continued)
3.5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

• HC1

161320-58-7 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[[(dimethylamino) acetyl] amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, dihydrochloride,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

161320-59-8 USPATFULL
4-Morpholineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-, [5R-[5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alp
ha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL

161320-62-3 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-1-oxopcopyl]amino]-1,4,4a,5,5a,6,11,12a-octahydco-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride (9CI) (CA INDEX NAME)

• HC1

161320-63-4 USPATFULL
2-Naphthacenecarboxanide, 4-(dimethylamino)-9[(dimethylamino) acetyl) amino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-N-(1-pyrrolidinylmethyl)-,
(45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)](SCI) (CA INDEX NAME)

Absolute stereochemistry.

161320-64-5 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[{(hexylamino)acetyl]amino}1.4.4a.5,5a.6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, dihydrochloride, {45-(4.alpha.,4.alpha.,5.alpha.,5.alpha.,6.al
pha.,12a.alpha.)}- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

Absolute stereochemistry.

●2 HC1

161320-65-6 USPATFULL

2-Naphthacenecarboxamide, 4-{dimethylamino}-1,4,4a,5,Sa,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-9-[{methoxyamino}acetyl]amino}-6-methyl-1,11-dioxo-, [4S-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}-[9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-66-7 USPATFULL

1013/20-60-7 UNAFFULL
2-Naphthacenecarboxsmide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-9[[((phenylmethoxy) amino] acetyl]amino]-, [45(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA
INDEX NME)

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL

161320-70-3 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-9-[[(hydroxyamino)acetyl]amino]-6-methyl-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)](9C1) (CA INDEX NAME)

Absolute stereochemistry.

161320-71-4 USPATFULL

2-Naphthacenecarboxamude, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[methyl:[phenylmethyl]amino]acety 1]amino]-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-72-5 USPATFULL
2,5-Diazabicyclo{2.2.1}heptane-2-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-5-methyl-(9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161320-67-8 USPATFULL

1H-Pyrazole-1-acetamide, N-[9-{aminocarbonyl}]-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-4-ethyl-,58-(5,alpha,5,3-alpha,6,alpha,6,alpha
a,7.alpha,10a,alpha)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-68-9 USPATFULL

1013CU-08-9 VSAIPULE
2-Naphthacenecarboxamide, 9-[{[(cyclobutylmethyl)amino]acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, (4S-(4.alpha.,4a.alpha.,5.alpha.,5.al
pha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-69-0 USPATFULL
2-Naphthacenecarboxamide, 9-[{(2-butenylamino)acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,1l,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, [4s-(4.alpha.,4a.alpha.,5.alpha.,5a.al
lpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

ANSWER 3 OF 4 USPATFULL (Continued)

161320-73-6 USPATFULL
4-Morpholineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-3-methyl- (9CI) (CA INDEX NAME)

161320-74-7 USPATFULL 2-Azabicyclo[2.2.1]heptane-2-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]- (9CI) (CA INDEX NAME)

161320-75-8 USPATFULL
2-Azabicyclo[2.2.2]octane-2-acetamide, N-[9-(aminocarbonyl)-7(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11pentahydroxy-5-methyl-10,12-dioxo-2-naphhacenyl)-,[5x(5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alpha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

161320-76-9 USPATFULL
1-Piperazinecarboxamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5, 5a, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]-, [5R-(5.alpha., 5a.alpha., 6a.alpha., 6a.alpha., 7.alp
ha., 10a.alpha.)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-77-0 USPATFULL

161320-77-0 USAFFULL
P-iperazineacetanide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-4-hydroxy-, [SR-(5.alpha.,5a.alpha.,6.alpha.,6a.al
pha.,7.alpha.,10a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-78-1 USPATFULL
1-Piperazineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-3-methyl- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL

161320-82-7 USPATFULL

L-Alanine, N-[2-[[9-(aminocarbonyl]-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-2-oxoethyl]-, [SR[5.alpha.,5a.alpha.,6.alpha.,6a.alpha.,7.alpha.,10a.alpha.]]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

161320-83-8 USPATFULL
2-Naphthacenecatboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-{{[((2-methylcyclopropyl)oxy]amino]acetyl]amino]-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-84-9 USPATFULL 2-Maphthacenecarboxanide, 9-[{[(bicyclo[2.2.2]oct-2-yloxy) amino] actyl] amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161320-79-2 USPATFULL
4-Thiomorpholineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-3-cyclopropyl- (9CI) (CA INDEX NAME)

161320-80-5 USPATFULL

1H-Pyrrole-1-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl)-3-ethyl-, [5R-(5,alpha,5,alpha,-6,alpha,-6,alpha,-7,alpha,-10a,alpha)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-81-6 USPATFULL

Ioi.xcU-81-6 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-9-[[[(1H-imidazol-2ylmethyllamino]acetyl]amino]-6-methyl-1,11-dioxo-, [45(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161320-85-0 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydrosy-6-methyl-9-[[[(3-methyl-2-butenyl)amino]acetyl]amino]-1,11-dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,5a.alpha.,6a.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-86-1 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[[[4-{(2-methyl-1-oxopropyl)amino)phenyl]amino]acetyl]amino]-1,11-dioxo-,[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

L6 ANSWER 3 OF 4 USPATFULL (Continued)

PAGE 1-B

-Pr-i

161320-87-2 USPATFULL

101320-87-2 USAFFULL
1-Pyrrolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5.5a, 6.6a, 7.10,10a, 12-octahydro-1, 6.8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl-13-ethyl-(9C1) (CA INDEX NAME)

161320-88-3 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-penthydroxy-6-methyl-9-[[2-[[(1-methyl-1H-imidazol-2-yl)methyl]amino]-1-oxopropyl]amino]-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-89-4 USPATFULL 2-Naphthacenecarboxamide, 9-[[2-(dicyclopropylamino)-1-oxopropyl]amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL

161320-93-0 USPATFULL
1-Piperidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-4-(aminomethyl)-.alpha.-methyl- (9CI) (CA INDEX NAME)

161320-94-1 USPATFULL 2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[[2-[[3-(methylaulfonyl)phenyl]amino]-1-oxopropyl]amino]-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-95-2 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-2-methyl-1-oxopropyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 4 USPATFULL (Continued)

161320-90-7 USPATFULL
1-Piperaxineacetamide, N-{9-{aminocarbonyl}-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl}-4-methoxy-.alpha.-methyl-(9CI) (CA INDEX NAME)

161320-91-8 USPATFULL

**Thiomorpholineacetamide, N-(9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]-.alpha,2-dimethyl- (9CI) (CA INDEX NAME)

161320-92-9 USPATFULL
Carbamic acid, [2-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-1-methyl-2-oxoethyl]-, 2-propenyl ester
(9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

161320-96-3 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-{(2-methyl-2-(methylamino)-1-oxopcopyl)amino]-1,11-dioxo-, {6-(4s-(4.alpha.,4a.alpha.,5a.alpha.,5a.alpha.,6.alpha.,12a.alpha.)}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161320-97-4 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-9-[(2-[([3-methylcyclobutyl)oxy]amino]-1-oxobutyl]amino]-1,11-dioxo-(9CI) (CA INDEX NAME)

161320-98-5 USPATFULL 2-Naphthacenecarboxamide, 4-{dimethylamino}-9-[{2-[{1,1-dimethylamino}]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161320-99-6 USPATFULL
2-Isoxazolidineacetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-.alpha.-ethyl-4-methyl- (9CI) (CA INDEX NAME)

161321-00-2 USPATFULL
4H-1,2,4-Triazole-4-acetamide, N-[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]-.alpha.-ethyl-3-methyl- (9CI) (CA INDEX NAME)

161321-01-3 USPATFULL

161321-01-3 OFAIROLD
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[2-(dimethylamino)-3,3-dimethyl-1-oxobutyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(961) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161321-05-7 USPATFULL
2-Naphthacenecarboxamide, 9-[[2-(diethylamino)-3-mercapto-1-oxopropyl]amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-06-8 USPATFULL
1-Fiperazineacetanide, N-[9-(aminocarbonyl)-7-(dimethylamino)5, Sa, 6, 6a, 7, 10, 10a, 12-octahydro-1, 6, 8, 10a, 11-pentahydroxy-5-methyl-10, 12dioxo-2-naphthacenyl]-.alpha.-(mercaptomethyl)- (9CI) (CA INDEX NAME)

161321-07-9 USPATFULL

Sutanoic acid, 4-[(9-(aminocarbonyl)-7-(dimethylamino)-5,5a,6,6a,710,10a,12-octahydro-1,63,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]aminoj-3-(hewylamino)-4-oxo-(9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

161321-02-4 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-{{2-(ethylamino)-2-methyl-1-oxobutyl]amino}-1, 4.a, 5, 5a, 6, 11, 12a-octahydro-3, 5, 10, 12, 12a-pentahydroxy-6-methyl-1, 11-dioxo-(9CI) (CA INDEX NAME)

161321-03-5 USPATFULL
2-Maphthacenecarboxamide, 4-(dimethylamino)-9-{{2-(dimethylamino)-3-hydroxy-1-exopropyl}amino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-04-6 USPATFULL

1H-Imidazole-1-acetamide, N-[9-(aminocarbony1)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthaceny1]-.alpha.-(hydroxymethyl)-4-methyl- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161321-08-0 USPATFULL
2H-1, 2-Oxazine-2-propanoic acid, 4-{[9-(aminocarbonyl)-7-(dimethylamino)-5,5a, 6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12-dioxo-2-naphthacenyl]amino]tetrahydro-6-(hydroxymethyl)- (9CI) (CA INDEX NAME)

161321-09-1 USPATFULL
Butanoic acid, 4-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-3-[ethyl(phenylmethyl)amino]-4-oxo-(9CI)
(CA INDEX NAME)

161321-10-4 USPATFULL
Pentanoic acid, 5-[(9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dixxo-2-naphthacenyl]amino]-4-(cyclopropylamino)-5-oxo- (9CI) (CA INDEX NAME)

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161321-11-5 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9[((dimethylamino)phenylacetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-12-6 USPATFULL

101321-12-0 USAFIGUE 2-Naphthacenecarboxamide, 9-{[(butylamino) (4-hydroxyphenyl) acetyl] amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxyf-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-13-7 USPATFULL
2-Naphthaceneoarboxamide, 4-(dimethylamino)-9-[{(dimethylamino)(4-methoxyphenyl)acetyl)anino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL

IT 161321-16-0P 161321-17-1P 161321-18-2P
161321-19-3P 161321-20-6P 161321-21-TP
161321-22-8P 161321-23-9P 161321-24-0P
161321-25-1P 161321-26-2P 161321-37-3P
161321-38-4P 161321-29-5P 161321-30-8P
161321-31-9P 161321-39-0P 161321-39-1P
(prepn. of 9-[(N-substituted-glycyl)amido]-6-methyl(ene)-5-hydroxy-6-deoxytetracyclines as antibiotics)
RN 161321-16-0 USPATFULL
CN 2-Naphthacenecarboxaside, 9-[(bromoacetyl)amino]-4-(dimethylamino)1,4,5,5,8,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, (45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161321-17-1 USPATFULL
2-Naphthacenecarboxamide, 9-[(bromoacetyl)amino]-4-(dimethylamino)1.4.4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, monohydrobromide, [45-(4.a]pha.,4a.alpha.,5.alpha.,5a.alpha.,6.a
lpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

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ANSWER 3 OF 4 USPATFULL (Continued)

161321-14-8 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[(ethylmethylamino)[4-(trifluoromethyl)phenyl]acetyl]amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9CI) (CA INDEX NAME)

161321-15-9 USPATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[[[4-(dimethylamino)phendid, 4-(dimethylamino)phendid, 1,4-(a,5,5,a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-(9(5)) (CA INDEX NAME)

IT 161321-34-2

[61921-34-2
(prepn. of 9-[(N-substituted-glycyl)amido]-6-methyl(ene)-5-hydroxy-6deoxytetracyclines as antibiotics)
61321-34-2 USPATRULL
2-Naphthacenecarboxamide, 9-amino-4-(dimethylamino)-1,4,4a,5,5a,6,11,12aoctahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-,
(45,4aR,55,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 3 OF 4 USPATFULL (Continued)

161321-18-2 USPATFULL 2-Naphthacenecarboxamide, 9-[(chloroacetyl)amino]-4-(dimethylamino)-1.4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrochloride, [45-(4.alpha.,4a.alpha.,5.alpha.,5.alpha.,6.alpha.,12a.alpha.)]- (9CI) (CA INDEX NAME)

● HC1

161321-19-3 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-bromo-1-oxopropyl)amino)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

• HBr

161321-20-6 USPATFULL
2-Naphthacenecarboxamide, 9-[(bromoacetyl)amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, [45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)], sulfate (2:1) [(salt) (9C1) (CA INDEX NAME)]

CRN 161321-16-0 CMF C24 H26 Br N3 O9 CDES 1:452:4A,4AA,5A,5AA,6A,12AA

L6 ANSWER 3 OF 4 USPATFULL (Continued)

CM 2

CRN 7664-93-9 CMF H2 O4 S

161321-21-7 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-bromo-2-methyl-1-oxopropyl)amino]-4(dimethylamino]-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide,
[45-(4.alpha.,4a.alpha.,5.alpha.,5a.alpha.,6.alpha.,12a.alpha.)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

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161321-22-8 USPATFULL

101321-22-8 upArtPuLs
2-Naphthacenecarboxamide, 9-[(2-bromo-1-oxobutyl) amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, monohydrobromide (9C1) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

• HBr

161321-25-1 USPATFULL
2-Naphthacenecarboxamide, 9-[(2-bromo-3-hydroxy-1-oxopropyl)amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

161321-26-2 USPATFULL
2-Naphthacenecarboxamide, 9-{(2-bromo-3-mercapto-1-oxopropyi)amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

• HBr

RN 161321-23-9 USPATFULL
CN 2-Naphthacenecatboxamide, 9-[(2-bromo-1-oxopentyl) amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dloxo-, monohydrobromide (9CI) (CA INDEX NAME)

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161321-24-0 USPATFULL

2-Naphthacenecarboxamide, 9-{(2-bromo-2-methyl-1-oxobutyl)amino]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)
161321-27-3 USPATFULL
Butanoic acid, 4-[[9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-3-bromo-4-oxo-, monohydrobromide (9CI) (CA
INDEX NAME)

161321-28-4 USPATFULL
Pentanoic acid, 5-[{9-(aminocarbonyl)-7-(dimethylamino)5,5a,6,6a,7,10,10a,12-octahydro-1,6,8,10a,11-pentahydroxy-5-methyl-10,12dioxo-2-naphthacenyl]amino]-4-bromo-5-oxo-, monohydrobromide (9CI) (CA
INDEX NAME)

161321-29-5 USPATFULL
2-Naphthacenecarboxamide, 9-[(bromophenylacetyl)amino]-4-(dimethylamino)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

ANSWER 3 OF 4 USPATFULL (Continued)

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161321-30-8 USPATFULL
2-Naphthacenecarboxamide, 9-[[bromo(4-hydroxyphenyl)acetyl]amino]-4(dimethylmaino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX
NAME)

• HBr

161321-31-9 USPATFULL

101321-31-9 USAFFULL
2-Naphthacenecarboxamide, 9-[[bromo(4-methoxyphenyl)acetyl]amino]-4(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDE (CA INDEX

ANSWER 3 OF 4 USPATFULL (Continued)

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L6 ANSWER 3 OF 4 USPATFULL (Continued)

● HBr

161321-32-0 USPATFULL

2-Naphthacenecarboxamide, 9-{{bromo{4-(trifluoromethyl)phenyl}acetyl}amino]-4-(dimethylamino)-1.4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

• HBr

161321-33-1 USPATFULL

101321-33-1 OSARTOLD
2-Naphthacenecarboxamide, 9-[[bromo[4-(dimethylamino]phenyl]acetyl]amino]4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12apentahydroxy-6-methyl-1,11-dioxo-, monohydrobromide (9CI) (CA INDEX NAME)

L6 ANSWER 4 OF 4 USPATFULL
ACCESSION NUMBER:
TITLE:
Tetracycline derivatives substituted in the 7 position and process for preparing the same
Bernardi, Luigi, Milan, Italy
Colonna, Vincenzo, Milan, Italy
De Castiglione, Roberto, Milan, Italy
Mani, Paolo, Milan, Italy
PATENT ASSIGNEE(S):
Societa Farmaceutici Italia S.p.A., Milan, Italy
(non-U.S. corporation)

US 3901942 US 1973-397691 DATE 19750826 19730917 (5) PATENT INFORMATION: APPLICATION INFO.:

NUMBER DATE

PRIORITY INFORMATION: IT 1972-29329 19720918

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted Davis, C.
LEGAL REPRESENTATIVE: Hubbell, Cohen & Stiefel
NUMBER OF CLAIMS: 1,2

EXEMPLARY CLAIM: 1,2

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Process for the preparation of tetracycline derivatives substituted in the 7 position comprising first obtaining tetracycline derivatives substituted in the 7 position into the desired substituent, and then eliminating the substituent in the 9 position. Invention further comprises products obtained during the course of the above process.

IT 53108-30-8P

(prepn. of)

53108-30-8P
(prepn. of)
53108-30-8 USFATFULL
2-Naphthacenecarboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11dioxo-(SCI) (CA INDEX NAME)

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(FILE 'HOME' ENTERED AT 11:51:12 ON 19 MAR 2002)

	FILE	'REGIS	TRY'	ENTE	RED AT	11:51:17	ON	19	MAR	2002
L1			STRU	CTURE	UPLOA	DED				
L2		2	S L1							
L3			STRU	CTURE	UPLOA	DED				
L4		8	S L3							
L5		300	S L3	FULL				•		

FILE 'USPATFULL' ENTERED AT 11:53:42 ON 19 MAR 2002 L6 4 S L5